TECHNOLOGY TRANSFER IN THE PEOPLE’S REPUBLIC OF CHINA: AN ASSESSMENT

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I. INTRODUCTION

Perhaps the most striking aspect of the trading relationship between the United States and the People’s Republic of China\(^1\) is its explosive growth over the last fifteen years. In 1973, the total value of bilateral trade between the U.S. and China was $805 million (up from a mere $5 million just two years earlier).\(^2\) In 1987, this figure reached $10.4 billion — an increase of over 1000 percent.\(^3\)

This growth notwithstanding, the United States is not a commanding presence in the PRC’s overall trade picture. The U.S. share of total PRC imports in 1986 (almost $43 billion) is only 7.2 percent, and the PRC accounted for only slightly over 1 percent of U.S. imports.\(^4\)

Considering that the United States is the world’s largest market and that China, with over 1.1 billion people, has the world’s largest population, there is clearly room for significant further growth in the bilateral trading relationship between the two countries.

Much of this growth will undoubtedly occur in the technology sector. Since the announcement of the “Four Modernizations” in 1978, Chinese economic policy has consistently emphasized the im-

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1. Hereinafter variously the People’s Republic of China, the PRC or China. The People’s Republic of China was proclaimed on October 1, 1949, by Mao Zedong, Chairman of the Chinese Communist Party.


3. Id.

4. U.S. Department of Commerce. There is now a total of over $20 billion in foreign direct investment in China, of which only 14 percent is of U.S. origin. The largest source of investment in the PRC is Hong Kong, with total commitments, from 1979 through 1985, of over $10 billion (63.8 percent of the total). The U.S. is second with 13.1 percent, and Japan follows with total commitments during this period of $1.6 billion (9.8 percent of the total). The National Council for U.S.-China Trade, U.S. Joint Ventures in China: A Progress Report (March 1987), at 106 [hereinafter Progress Report].
importance of technology in China's economic development. The Chinese view technology as essential to the development of a modern society characterized by a rising standard of living, agricultural self-sufficiency, the ability to defend themselves and the ability to participate competitively in world markets. Technology transfer will therefore remain an attractive area of potential business in China for the foreseeable future.

Despite the importance of technology transfer to the Chinese, this area of investment has been, and will continue to be, fraught with uncertainty. China's need to import technology, while publicly recognized, has not always been matched by its ability to pay for it, as China has experienced chronic shortages of foreign exchange. China has measured its industrial property protection standards by the standards adopted by other developing countries, rather than those adopted by Western industrialized nations, tolerating deficiencies in the scope and quality of industrial property protection that U.S. investors find troubling.

China's laws regarding the importation of technology are complex, and its governmental structure is large and cumbersome. Both have been characterized by constant evolution in recent years. As investments made earlier have begun to mature, some foreign investors have experienced difficulty in repatriating their profits in the face of stringent Chinese controls on foreign exchange remittances.

These and other aspects of China's foreign investment climate have led to frustration and wariness on the part of current and potential investors alike and were at least partially responsible for the significant decline in investment flows to China that occurred during 1985 and 1986.

5. In March, 1978, shortly after the Four Modernizations were announced, then-Premier Deng Xiaopeng stated: "The crux of the four modernizations is the mastery of science and technology. Without modern science and technology, it is impossible to build modern agriculture, modern industry or modern defense." Progress Report, supra note 4, at 8.

6. As used in this article, "industrial property" refers to intellectual property, whether or not patentable, used in a business. It includes intellectual property that provides a competitive advantage and that is secret (i.e., trade secrets) but does not include copyrights and trademarks.

7. Total U.S. investment in China fell from $1.1 billion in 1985 to $528 million in 1986. Progress Report, supra note 4, at 103. However, the Progress Report suggests that other factors - such as a world decline in oil prices resulting in significant cutbacks in natural resource exploration and development - may also explain this decrease and notes official Chinese figures showing that "the number of newly signed U.S. equity joint ventures rose from 76 in 1985 to 81 in 1986 and that the commitments to these equity joint ventures more than doubled, rising from $130 million in 1985 to $263 million in 1986." Id. at 105.
The Chinese have reacted to these concerns in a variety of ways. They have expanded and improved protection of industrial property by enactment of a Chinese patent law and the promulgation of amplifying regulations. They have attempted to upgrade and improve the regulatory and legal framework for foreign investment generally, gradually opening up and rendering more transparent the legal and administrative procedures through which investment commitments are made and protected. And, as investments have multiplied and become more complex, the Chinese have demonstrated a willingness to address new problems as they arise.

There remain, however, significant problems for the foreign investor. The Chinese bureaucracy remains opaque to the outsider. The legal environment is unfamiliar and unclear with respect to both substantive law and legal remedies and the role of Chinese courts in enforcing those remedies. Problems with industrial property protection persist, and uncertainties remain regarding China's ability to sustain and assimilate high levels of foreign investment.

This article will summarize the steps taken since 1978 to open China to foreign investment and provide a stable legal environment. It will discuss recent developments affecting that climate and assess problems likely to be encountered by foreign investors in the transfer of technology to Chinese entities.

II. DEVELOPMENT OF THE LEGAL AND REGULATORY FRAMEWORK FOR FOREIGN INVESTMENT SINCE 1978

With the death of Mao Zedong in 1976, the PRC abruptly entered a new political and economic era. The new leadership, recognizing that the Cultural Revolution had caused economic stagnation and economic isolation, moved quickly to alter course. In 1978, then-Party Chairman Hua Guofeng announced the initiation of the "Four Modernizations" (industry, agriculture, defense and science and technology). Underlying the Four Modernizations was the recognition by the leadership of the major role that foreign investment would be called upon to play in the transformation of China into a twentieth-century economy. In 1978, then-Premier Deng Xiaopeng also announced China's "Open Door" Policy of promoting investment in, and trade with, the PRC. In the following year, China entered into a comprehensive reciprocal trade agreement with the United States (just a few years earlier, such a step would have been unthinkable) that opened up vast new pros-
pects for increased economic relations between the two countries.\(^8\) In 1979, the central government also began a series of aggressive economic experiments in a number of coastal provinces and cities that were intended to encourage foreign investment while moving away from rigid state control of the economy.\(^9\) The Special Economic Zones and Economic and Technological Development Zones were converted into test-tube economies in order to determine what mixes of deregulation and investment incentives might offer the best prospects for the country at large. Many of the most successful of those experiments have since been implemented at the national level.

The effort to attract foreign investment produced results: by the end of 1986, foreign investors owned, wholly or in part, 7,738 enterprises in the PRC.\(^10\) However, as the Chinese economy became more complex and the number and variety of foreign investments in the PRC multiplied, the lack of a legal structure capable of providing an orderly framework for economic relations grew more obvious.\(^11\)

Much of the *corpus* of Chinese law - and the government infrastructure trained to administer and interpret it - had been obliterated during the Cultural Revolution. Moreover, economic relations with the Western world had been so limited that many government officials, both at the national and provincial level, had little or no experience in negotiating with western investors. Chinese officials (as well as prospective Chinese investment partners) had little understanding of the issues that were of critical importance to foreign investors or the substantive provisions of Chinese law that might govern those issues outside the contract.

Contract negotiations were typically carried on by reference to

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9. Notable among these were the establishment of Special Economic Zones in the cities of Shenzhen, Zhuhai and Shantou in Guangdong Province and the city of Xiamen in Fujian Province as well as the establishment of Economic and Technological Development Zones in fourteen coastal cities, principally Dalian, Guangzhou, Shanghai and Tianjin. *See E. Pow & M. Moser, Law and Investment in China's Special Investment Areas, Foreign Trade, Investment, and the Law in the People's Republic of China* 199 (M. Moser ed. 1987) [hereinafter Moser].


11. *Id.* at 46.
forms of draft contracts and to form contractual provisions. Although the forms utilized were based largely on established international contract rules and procedures, Chinese negotiators apparently agreed only rarely to contractual provisions that departed from or were otherwise inconsistent with the forms used as negotiating texts. Their reluctance to do so may probably be ascribed to their lack of understanding of the issues presented as well as, perhaps, bureaucratic and ideological impediments.

The reluctance on the part of the Chinese to agree to contractual provisions regarding any issue not addressed in contract forms proved unsatisfactory for many foreign investors, since it left them without contractual protection on many issues of importance to them.

The PRC has recognized and responded to these shortcomings. Since 1979, the Chinese have promulgated a steady flow of national laws and regulations intended to encourage foreign investment and to provide a stable and predictable legal climate. The Joint Venture Law (1979) established the "equity joint venture" as the favored vehicle for foreign investment in China. The Economic Contract Law (1981) codified national principles of contract law among Chinese entities. The Foreign-Related Economic Contract Law (1985), which conformed in many respects to internationally accepted contract norms (such as they are), established governing principles for contracts with foreign entities. The Chinese Patent Law (1985) and Trademark Law (1983) provided protection for intellectual property. And the Wholly Foreign-Owned Enterprise Law (1986) offered, for the first time, national statutory recognition of foreign entities involving no Chinese participation. Most recently, the Contractual Joint Venture Law (1988) has created a legal framework for the formation and operation of contrac-

12. Id. at 47.
13. Id. at 48.
14. The legislative process leading to the enactment of legislation in the PRC varies with the subject matter and perceptions of the importance of the legislation to the State. The National People’s Congress (NPC), which, under the Constitution adopted in 1982, is the PRC’s highest legislative body, meets once each year and approves legislation affecting “basic laws in such areas as criminal law, civil law, and laws on state institutions.” Id. at 6. The Standing Committee of the NPC, however, also has the power under the 1982 Constitution “to enact and revise laws other than those that must be enacted by the [NPC].” Id. at 7. The State Council is the Executive branch of the government, id. at 8, but, under Article 89 of the Constitution, has the power to enact “administrative laws and regulations”, as well as decisions and decrees. Id. Each of these three bodies has played a major role in the reconstruction of the PRC’s legal fabric since 1978.
15. Id. at 5 n.25.
tual joint ventures. 16

The Chinese have also taken a number of significant other steps to join the international community of trading nations. China joined the Customs Cooperation Council in 1983 and became a signatory to the Paris Convention for the Protection of Industrial Property in 1984. In 1983, in order to provide for continued growth in its textile exports, China became a party to the Multifiber Arrangement under the General Agreement on Tariffs and Trade ("GATT") and, in 1986, formally applied for readmission to the GATT. 17

China's internal trade policies have also undergone rapid and continuous change. In conjunction with the initiation of the Open Door policy in 1979, the national government delegated to provincial and regional authorities much of its responsibility for decisions regarding foreign investment. Subsequently, however, the degree of national control over such decisions (and the requirements imposed on foreign investors as a precondition of government approval of their investments) has fluctuated, principally as a result of concerns regarding foreign exchange and cycles of the Chinese economy. 18

In 1982, the government formed a new Ministry of Foreign and Economic-Related Trade ("MOFERT"), 19 which has since emerged as the preeminent government organ for the approval of foreign investment and technology transfer contracts. New laws alternately regulating and encouraging foreign investment in various

16. Chinese statutes and regulations enacted at the national level during this period number over two hundred, ranging in subject matter from bankruptcy to worker rights, any one of which may affect a foreign investor depending on whether a Chinese entity is created, the nature of that entity and the jurisdiction in which the entity is established or operations are conducted. See Zheng, supra note 10, at xxxiii.

17. China was one of the original 23 contracting parties to the GATT in 1947. Following establishment of the People's Republic, China permitted its membership to lapse.

From the standpoint of intellectual property protection, China's application for membership in the GATT is especially significant. The Uruguay Round of GATT negotiations, announced in Punta Del Este, Uruguay in October, 1986, will include discussions of new international standards for the protection of intellectual property. China has participated as an observer in the Uruguay Round and at the time this paper was prepared planned to attend the GATT ministerial mid-term review to be held in Montreal during December, 1988. N.Y. Times, Nov. 15, 1988, at D17, col. 1 (late city final ed.).

18. See generally Horsley, supra note 8.

19. MOFERT was formed by the merger of the preexisting Ministries of Trade and Foreign Economic Relations, the Foreign Investment Commission and the State Import-Export Commission. Chwang & Thurston, Technology Takes Command: the Policy of the People's Republic of China with Respect to Technology Transfer and Protection of Intellectual Property, 21 INT'L L. 129, 135 n.34 (Winter 1987) [hereinafter Chwang & Thurston].
forms have followed each other at regular intervals, as China has continuously revised its approach to foreign investment based on its experience and evolving priorities.

The following materials describe the most significant of China's current laws and regulations, first in the context of forms of doing business available to the foreign investor (section III), then in the context of the legal environment in which these entities operate (section IV). Section V contains a brief discussion of Chinese patent law and protections available for trade secrets.

III. LAWS GOVERNING FORMS OF INVESTMENT: EQUITY JOINT VENTURES, CONTRACTUAL JOINT VENTURES AND WHOLLY FOREIGN-OWNED ENTERPRISES

Since 1978, foreign investment in the PRC has taken three principal forms: "equity joint ventures," "contract joint ventures" and wholly foreign-owned enterprises. The development of Chinese law governing each of these principal business forms is briefly described below.

A. Equity Joint Ventures

The so-called "equity joint venture"20 was the first foreign-investment vehicle permitted by the Chinese government in the post-Mao era and historically has been the vehicle favored by the Chinese for acquiring Western technology. The Law of the People's Republic of China on Joint Ventures Using Chinese and Foreign Investment21 and its Implementing Regulations22 were intended to create an environment of legal certainty for foreign investors. Equity joint ventures continue to operate in a legal environment that is more comprehensive and well-developed than that available to any other investment form in China.

This environment offers certain advantages to the foreign investor. For example, under the Joint Venture Law and Implement-

20. The term "equity joint venture" does not appear in the Joint Venture Law (see infra note 21) or its Implementing Regulations (see infra note 22) and is not defined elsewhere in Chinese statutory law (although it does appear in the Technology Transfer Regulations (see infra note 105)).

21. Adopted on July 1, 1979, at the Second Session of the Fifth National People's Congress and promulgated July 8, 1979 [hereinafter the Joint Venture Law].

ing Regulations, equity joint ventures are considered to be Chinese legal persons and should not, in theory, operate at a disadvantage due to foreign ownership in their legal and economic relations with the government and other Chinese entities. The liability of participants in equity joint ventures is limited to their respective investments, a concept that U.S. investors, accustomed to limited-liability concepts, find attractive. In addition, under various regulations promulgated at both the national and provincial levels to encourage the formation of equity joint ventures, such entities receive valuable tax incentives that are generally unavailable to other forms of investment. By the end of 1986, over 3200 equity joint ventures had been formed in China, of which 219 involved U.S. parties.

The very certainty that the Chinese created in order to encourage foreign investment has, however, also operated to create a degree of inflexibility that many foreign investors find troubling. While the legal requirements for the establishment of equity joint ventures are well-established, they are also rigid. For example, the Chinese have imposed significant capital requirements on participants in equity joint ventures (e.g., up to seventy percent of the total investment must take the form of equity; borrowed funds may not be used to meet capitalization requirements).

23. Id. art. 2. Although the term "Chinese legal person" is not defined in the Joint Venture Law or the Implementing Regulations, the subsequently enacted General Principles of Civil Law of the People's Republic of China, promulgated April 6, 1986, by the Sixth National People's Congress [hereinafter the Civil Code] define the term "legal person" as "an organization that possesses capacity to acquire civil rights and competence to perform civil acts, and that, according to the law, may independently assume rights and bear civil liability." Civil Code art. 36.

This definition appears to extend to collectively and State-owned enterprises, id. art. 41; contractual joint ventures upon approval and registration, id.; and wholly foreign-owned enterprises, id. See also Law of the People's Republic of China on Wholly Foreign-owned Enterprises, infra note 83, art. 8.

24. Joint Venture Law, supra note 21, art. 4. See also the discussion of limitations on the liability of other entities at note 52, infra.

25. The Income Tax Law of the People's Republic of China for Sino-Foreign Joint Ventures, promulgated September 10, 1980, by the National People's Congress and revised on September 2, 1983, by the Standing Committee [hereinafter the Joint Venture Income Tax Law], provides that an equity joint venture with a term of ten years or more is exempt from income taxes for the first two years in which it has income that would otherwise be taxable and is exempt from 50 per cent of the otherwise applicable tax for the following three years. Joint Venture Income Tax Law art. 5, as revised. See generally Zheng, supra note 10, at 273.

27. Progress Report, supra note 4, at 98.
28. The Implementing Regulations require that joint ventures with a total investment
In addition, the Joint Venture Law requires that the foreign investment be a minimum of 25 percent of the total capital invested in the enterprise.\textsuperscript{29} Although in general this may not cause difficulty (historically most equity joint ventures have had 50:50 or 49:51 foreign-to-local investment ratios),\textsuperscript{30} it may restrict some marginal investment and, if Chinese private entities increase in size, prevent the formation of joint ventures in which the foreign contribution would not optimally constitute 25 percent of the venture.

The Joint Venture Law, as implemented, places numerous restrictions on the ability of foreign equity joint venture parties to make their contributions in kind. Article 28 of the Implementing Regulations, for example, provides that machinery or other equipment proposed as a capital contribution must be “indispensable” to production and unavailable in China under commercially reasonable terms and may not be valued (for purposes of calculating the foreign party’s contributions) at a level that is higher than the “international price” for similar items.

Similar restrictions apply to contributions of “industrial property rights” and “proprietary intellectual property.” For example, such rights and property must foster either (1) “the production of new products that China urgently needs or products suitable for export;” (2) marked improvements in either the quality of existing products or manufacturing productivity; or (3) “marked conversion” of energy or raw materials.\textsuperscript{31} Extensive documentation is required of the contributor’s rights to or ownership of industrial property or rights,\textsuperscript{32} and the Chinese government reserves the right to examine and approve the contribution of any property that is proposed for contribution by the foreign joint venturer.\textsuperscript{33}

The Implementing Regulations also impose a number of restrictions on agreements negotiated between equity joint ventures and suppliers of technology. Although they apply to all technology of up to $3 million be capitalized at seventy percent of the total investment. Joint ventures with a total investment of from $3 million to $10 million must be capitalized at fifty percent. The capitalization percentage declines to forty percent for investments totaling from $10 million to $30 million and to thirty percent for investments totaling in excess of $30 million. M. Moser, \textit{Foreign Investment in China: The Legal Framework}, in Moser, \textit{supra} note 9, at 106.

\textsuperscript{29} \textit{Joint Venture Law}, \textit{supra} note 21, art. 4.
\textsuperscript{30} \textit{Zheng}, \textit{supra} note 10, at 260.
\textsuperscript{31} \textit{Joint Venture Law}, \textit{supra} note 21, art. 5.
\textsuperscript{32} \textit{Id.} art. 29.
\textsuperscript{33} \textit{Id.} art. 30.
importations by joint ventures, these restrictions are presumably intended principally to control arrangements in which the foreign party to a joint venture also serves as a supplier of technology to the venture and to prevent exploitation by such suppliers at the expense of the Chinese party to the venture. For example, the Implementing Regulations require that imported technology be “appropriate and advanced, enabling the resulting products to display marked social and economic results domestically, or to have competitive capacity on the international market.”

All import agreements must be examined and approved by the appropriate approval authority; tie-in arrangements and export restrictions on the resulting products are prohibited; prices, license fees or royalties must be fair and reasonable.

Perhaps most significantly, the Implementing Regulations expressly limit the term of any technology licensing arrangement to ten years and provide that, after termination, the Chinese party may continue to use the technology. Thus, in many practical respects, the foreign supplier is engaged in a sales transaction rather than a licensing arrangement.

The Joint Venture Law requires that profits be allocated to the parties in proportion to their investment and that profits be distributed in currency. These restrictions serve a dual purpose. First, the prospects for the survival of the venture are enhanced by the long-term commitment of each party; neither is able to place the other at a disadvantage by recouping his investment more rapidly than the other. Second, the products produced by the venture must be either sold in China or exported as part of a transaction involving foreign exchange; the foreign partner is not permitted to accept, as his share of the profits, goods produced by the venture that he can then resell in other markets at an additional profit.

Finally, the Joint Venture Law specifies that agreements and contracts creating equity joint ventures shall be governed by Chinese law.

There are two immediate drawbacks to the governing law pro-

34. Id. art. 44.
35. Id. art. 46.
36. Id. arts. 46.6, 46.2.
37. Id. art. 46.1.
38. Id. arts. 46.3, 46.4.
39. Id. art. 7.
40. Id.
41. Implementing Regulations, supra note 22, art. 15.
vision of the Joint Venture Law. First, it means that the agreement of the parties will be subject to China's Economic Contract Law, because the entity formed pursuant to the joint venture is considered a Chinese legal person. As a statute intended to reflect and implement the goals of the governing State Plan, the Economic Contract Law may not treat the obligations of the parties in a neutral way. Second, this provision deprives the foreign investor of the opportunity to graft any other provisions of law onto the deal.

The application of Chinese law can be troubling for the foreign investor in other ways. Much of the published law is of relatively recent vintage and may not be fully implemented or understood at all levels of the Chinese government. Also, many "laws" are unpublished internal regulations known only to government officials. As one commentator has indicated,

Most of these internal rules consist of directives which must be followed by Chinese negotiators in interpreting and implementing statutory laws. Some herald the introduction of new policies . . . others are simply a formalization of [previous] practices . . . [I]nternal rules complicate the elucidation and definition of China's legal system and . . . pose constant pitfalls in the way of attempts to understand the nature and operation of the rules regulating commercial transactions.

The restrictions of the Joint Venture Law may give pause to a foreign investor wary of long-term economic entanglements and unfamiliar with the Chinese legal environment. An investor who owns technology or know-how that represents a substantial resource commitment and that constitutes an appropriate contribution-in-kind to a joint venture may wish to keep his front-end expenses to a minimum, want a relatively high rate of early return and be interested in taking advantage of low Chinese labor wage rates to produce a product that is price-competitive in third markets.

Such an investor may be willing to operate in a less well-established legal environment than that afforded by the Joint Venture Law.

42. Id.; See supra note 23, and accompanying text.
43. The developments summarized in Part I notwithstanding, China's remains fundamentally a planned economy. Five-year State Plans establish economic and investment policies as well as priorities for the implementation of those policies. The Sixth State Plan was initiated by the Sixth National People's Congress in 1986.
45. Moser, supra note 9, at 3.
Law in order to gain greater flexibility in structuring his investment. This may explain why, from the promulgation of the Joint Venture Law in 1979 to the end of 1986, only slightly over 3,200 equity joint ventures were formed, as compared to over 4,300 contractual joint ventures during roughly the same period.46

B. The Law of the People's Republic of China on Chinese-Foreign Cooperative Joint Ventures

On April 13, 1988, the new Law of the People's Republic of China on Chinese-Foreign Cooperative Joint Ventures came into being.47 Although, as indicated above, contractual joint ventures are the preponderant form of foreign investment in the PRC (in terms both of the number of investments made and of total dollars committed)48 the contract joint venture was, until promulgation of the new law, the only major investment vehicle with respect to which no law at the national level had been developed.49

The absence of a national law governing the formation and operation of contractual joint ventures - and uncertainty as to the form such a law, if promulgated, might take - had been a growing source of concern to potential investors. Promulagation of the Contractual Joint Venture Law fills a large gap in the law of China governing foreign investment. The Chinese undoubtedly intended that the new law provide a far more certain legal environment for contractual joint ventures than had previously existed.

1. Pre-1988 Experience

Contractual joint venturers have historically operated in a legal environment governed almost entirely by contract. The most appealing aspect of contractual joint venture operations for the

46. ZHENG, supra note 10, at 234. The number of contractual joint ventures formed through 1987 is reported to have risen to slightly over 5,000. See China Economic News, Apr. 25, 1988, at 1, col. 1.

For the period 1979 through 1985, total investment committed to equity joint ventures in China exceeded $3.4 billion, while commitments to contractual joint ventures exceeded $8.2 billion. See Progress Report, supra note 4, at 101.


48. See supra note 46 and accompanying text.

foreign investor has been the flexibility afforded by contractual arrangements and the lack of rigid constraints such as those imposed by the Joint Venture Law. Parties wishing to forego the legal certainty offered by the Joint Venture Law have been able to structure their investments much as they pleased, consistent with the necessity of government approval. Thus, some contractual joint venturers have formed new Chinese entities to carry on the venture under the Joint Venture Law, while others have elected not to do so, instead choosing to operate within the framework of their own unique legal regime.

Major financial arrangements, such as the amount, form and timing of investments by the parties, the term of the venture, the form in which profits will be distributed and the allocation of profits (as well as the schedule on which they will be distributed) are each subject to such contractual provisions as the parties may agree to, provided that the contract meets the approval of the appropriate authorities.

For example, a foreign investor might agree to contribute technology and know-how, while his Chinese partner contributes real property and a labor pool. The share of each partner need not be linked to a third party valuation of his contribution (there is no minimum equity percentage, as in the case of equity joint ventures) but may freely be negotiated based on the parties' own assessment of the value to the enterprise of each other's contribution.

The contractual arrangements may permit one party, during the early years of the venture, to take out profits at a rate disproportionate to his initial investment, thus recovering his investment more quickly than the other. Such arrangements are particularly attractive to the foreign investor. Moreover, the payout of a contractual joint venture — unlike that of an equity joint venture — may be in the form of goods that the foreign investor is free to export and sell in a third market, thus increasing his economic return. The parties are also free to negotiate other issues bearing on their economic relationship, for example, the law under which disputes may be resolved, remedies for breach and duties in mitigation. None of these features (with the possible exception of the first) is available to the equity joint venturer.

The Chinese investor may, it should be noted, be quite comfortable with such arrangements; he benefits from access to foreign technology without the necessity of buying it, and typically (as in the case of equity joint ventures) he will own the technology out-
right when the term of the venture expires, with the prospect of indefinite use of the technology thereafter.\textsuperscript{50}

The contractual joint venture form is, however, not without disadvantages. As with the equity joint venture, contractual joint ventures have been subject to lengthy and uncertain approval requirements based on the value of the contract and the aims of the venture. While the liability of the parties to an equity joint venture is expressly limited to the assets of the venture,\textsuperscript{51} the liability of contractual joint venturers may not always be limited. Limited liability will depend on whether a new Chinese entity is formed pursuant to the joint venture contract, and whether this entity qualifies as a Chinese legal person under the applicable provisions of the Civil Code.\textsuperscript{52}

The chief disadvantages of the contractual joint venture have been its uncertain legal status and the lack of an established legal framework upon which contractual joint venturers could rely. Promulgation of the new Contractual Joint Venture Law reflects an effort to remove these disadvantages and thus should be a source of reassurance to foreign investors.

2. Basic Features of the Contractual Joint Venture Law

As with the earlier-enacted Joint Venture Law\textsuperscript{53} and Foreign Enterprise Law,\textsuperscript{54} the Contractual Joint Venture Law is intended only to establish a minimal legal framework for contractual joint ventures and will be followed by the issuance of more detailed im-

\textsuperscript{50} Although contractual joint ventures are not subject to the restrictions governing the importation of technology that are imposed on equity joint ventures through the Implementing Regulations, (see supra notes 31-38 and accompanying text), Chinese parties are aware of those provisions and will generally insist on the right to retain and use licensed technology after the term of the license expires.

In addition, Chinese regulations governing contracts for the import of technology will generally apply to such arrangements. These regulations contain a provision similar to that of the Implementing Regulations (see infra text section III. D).

\textsuperscript{51} See supra note 24.

\textsuperscript{52} In addition to the requirements of Article 36 of the Civil Code (see supra note 23 and accompanying text), Article 37 of the Civil Code requires that legal persons (1) be lawfully established, (2) possess the necessary property or funds, (3) possess their own name, organizational structure and place of business and (4) be able to assume civil liability independently. Civil Code art. 37

Article 48 of the Civil Code provides that the liability of entities doing business as Chinese legal persons is limited to the value of their assets; thus qualification as a Chinese legal person appears to be key to establishing limited liability. Id. art. 48.

\textsuperscript{53} See Joint Venture Law, supra note 21.

\textsuperscript{54} See Foreign Enterprise Law, infra note 83.
plementing regulations.\textsuperscript{55} However, the Contractual Joint Venture Law appears to codify much of the present governmental policy and practice and appears intended to reassure potential investors that the government will continue to permit a degree of flexibility in contractual arrangements for this form of investment that is unavailable to equity joint ventures.

The law’s stated purpose is “to expand economic cooperation and technical exchange with foreign countries and to promote the joint establishment, on the principle of \textit{mutual equality and benefit} . . . of Chinese-foreign contractual joint ventures within the territory of China” (emphasis added).\textsuperscript{56} It offers a guarantee that “[t]he State shall protect the lawful rights and interests of contractual joint ventures and of the Chinese and foreign parties”\textsuperscript{57} and that “[t]he right of a contractual joint venture to make its own operational and managerial decisions shall not be interfered with.”\textsuperscript{58}

The Contractual Joint Venture Law confirms that foreign and Chinese contractual joint venturers enjoy great flexibility (subject, of course, to government approval) in structuring the form and value of their contributions and the allocation, distribution and form of revenues. It provides that the joint venturers may provide by contract for “the investment or conditions for cooperation, the distribution of earnings or products, the sharing of risks and losses, the manner of operation and management and the ownership of the property at the time of termination. . . .”\textsuperscript{59} The law provides that the contribution of the investors to the venture “may be provided in cash or in kind, or may include the right to the use of land, industrial property rights, nonpatent [sic] technology, and other property rights.”\textsuperscript{60} It further provides that the investors may “distribute earnings or products [and] undertake risks and losses” in whatever fashion they agree to by contract\textsuperscript{61} and guarantees that foreign earnings from the venture, as well as salaries or “other le-
genuine income" of foreign participants, may be repatriated after payment of any taxes.\textsuperscript{62}

The Joint Venture Law also confirms past practice in that it permits contractual joint venturers to wind up their affairs in whatever way they see fit. For example, upon termination of the venture, they may choose to allocate hard assets such as real estate and improvements to the Chinese party and other assets, such as cash on hand, inventory and receivables to the foreign party.\textsuperscript{63} Likewise, the law ensures continuation of past policies permitting foreign investors to begin recouping their initial investment prior to the termination of the venture.\textsuperscript{64} This recoupment may, for example, take the form of a disproportionate share of revenues which, as noted above, may be repatriated or moved abroad after payment of appropriate taxes or may be in the form of products which the investor may dispose of in third markets. The law also confirms that, as in the past, investors in contractual joint ventures have a choice as to whether to form a new Chinese legal entity and clarifies that, if a new entity is formed, it may qualify as a Chinese legal person.\textsuperscript{65}

The Joint Venture Law assures a continued high degree of flexibility in arranging the management structure of the venture. It confirms that the foreign investor or its designee may serve as the chairman of the required board or "joint management institution,"\textsuperscript{66} provided that, if a foreigner so serves, a Chinese must be designated as the second in command.\textsuperscript{67} The option of placing a foreigner in overall charge of the venture is not clearly available to equity joint venturers.

3. Issues Unresolved

Although foreign investors have some assurance that the basic policy of the Chinese government toward contractual joint ventures will continue, the new law is quite vague on a number of issues that undoubtedly are of significance to any investment decision.

\textsuperscript{62} Id.
\textsuperscript{63} Id.
\textsuperscript{64} Id.
\textsuperscript{65} Id.
\textsuperscript{66} Id. art. 2.
\textsuperscript{67} Id. art. 12.
\textsuperscript{67} Id.
a. Management Alternatives

The Joint Venture Law is ambiguous regarding the management structures that are available to the joint venturers and the extent to which the choice of structure is dependent upon whether a new entity is formed pursuant to the joint venture.

While the new law clearly permits the contractual joint venture to have either a "board of directors" or a "joint managerial institution" (the venture must have one or the other), it is silent regarding the range of possibilities encompassed by the joint managerial institution and contains no detail regarding important issues such as the number of members of the board or joint managerial institution, the method of their selection and replacement, meeting requirements, voting rights and other issues typically addressed by U.S. corporate by-laws.

Although the law does contemplate the preparation and approval by the government of "articles of association" (in which the above and related issues may presumably be addressed), it places no apparent restrictions on the manner in which this step is to be accomplished. This raises a number of questions for which there are no ready answers. For example, who among the members of the joint managerial institution is capable of binding the venture contractually?

The law is also ambiguous regarding whether the management structure selected by the joint venturers is dependent on whether they elect to form a new Chinese legal entity. Article 12 of the law may be read, for example, to permit the formation of a board of directors only if the parties elect to form a new Chinese legal entity and to reserve "joint managerial institutions" for other contractual joint ventures.

b. Degree of Operational Authority

The degree of operational authority available to the governing structure ultimately selected is also unclear. The board or joint management institution "shall, according to the contract or the articles of association. . . , decide on the major issues concerning the venture." (emphasis added) What is meant by the term "major issues?" Is this provision intended as a broad - or specifically lim-
The law permits the board or joint management body to “decide on the appointment or employment of a general manager who shall take charge of the daily operation and management of the contractual joint venture.” The law does not require this step, however, thus leaving open the possibility that daily operational decisions may in fact be made by the board or joint management body of the venture.

c. Status as Limited Liability Company

As noted previously, the ability of contractual joint ventures to limit their liability has traditionally been a function of the ability of newly formed entities to qualify as Chinese legal persons. The new law makes it clear that this continues to be the case. Article 2 provides that “[a] contractual venture which meets the conditions for being considered a legal person under Chinese law, shall acquire the status of a Chinese legal person in accordance with law.” However, the law offers no new assurance that contractual joint ventures will be favorably considered for Chinese-legal-person status.

In this regard, one commentator has expressed concern that because in-kind contributions made to the venture are not always susceptible to precise valuation, the requirement that Chinese legal persons possess the necessary property or funds may frustrate efforts to qualify such ventures as legal persons — and therefore make it more difficult to limit the liability of the venture. Such concerns, one hopes, will be assuaged through implementing regulations.

d. Timeliness of Contributions

A high degree of attention is paid in the law to ensuring that contributions to the joint venture are timely made. Article 9 of the law requires that the parties “duly fulfil [sic] their obligations of contributing full investment” and do so “in accordance with the provisions of the laws and regulations” as well as those of the joint

71. Id.
72. Id. art. 2.
73. See supra note 52.
venture contract. Upon failure to do so, "the matter shall be handled by the examination and approval authority according to relevant State provisions." This provision raises two issues of great importance to the foreign investor.

First, how will it affect the provisions of the joint venture contract? Does it override any provision of the contract regarding failure to make timely contributions? If, for example, the Chinese party fails to make its contribution on a timely basis, what are the rights of the foreign party? May he avail himself of remedies provided for in the contract, or must he first submit the matter to the appropriate examination and approval authority (as the law appears to suggest)?

This issue is of particular significance because the law specifically provides that, in case of the failure of either party to make its contributions on a timely basis, the administering authority "shall set another time limit for the fulfilment [sic] of such obligations"; i.e., actually grant extensions of deadlines that were agreed to contractually. Furthermore, there is no indication whether the process contemplated by Article 9 is ex parte in nature or whether procedural protections of any kind are available to the other party who has made its required contributions and stands ready to go forward.

Second, what are the relevant "laws and regulations" and "State provisions" to which Article 9 refers? Among the possibilities is China's Foreign Economic Contract Law, which governs joint venture contracts between Chinese and foreign parties and contains a number of provisions regarding dispute resolution and access to Chinese courts.

Another possibility is the Contractual Joint Venture Law itself, Article 26 of which provides that disputes arising under the contract "shall be settled through consultation and mediation." Article 26 also contains provisions regarding arbitration and ultimate resort to Chinese courts that substantially parallel those of the Foreign Economic Contract Law.

The Chinese may also contemplate including in the implementing regulations contemplated by the law provisions governing contributions to contractual joint ventures that parallel those cur-

75. Contractual Joint Venture Law, supra note 47, art. 9.
76. Id.
77. Id.
78. See infra note 102.
Currently in existence for equity joint ventures. These regulations set forth in exhaustive detail the procedures that apply in the event either party to an equity joint venture fails to make any contribution on time. Under certain circumstances, such failure may result in the cancellation by the government of the joint venture.

Article 9 raises the possibility that a contractual joint venturer who has met his obligations and made his commitments under the joint venture contract may be thrown into legal limbo while MOFERT or other Chinese governmental agencies consider the failure of the other side to perform under the contract. It is to be hoped that implementing regulations will significantly clarify the Chinese intent on this issue.

e. Other Issues Raised by the Contractual Joint Venture Law

A number of other issues raised by the Contractual Joint Venture Law require clarification in implementing regulations. For example, what is the relationship between the Contractual Joint Venture Law and other applicable laws and regulations, and by what mechanisms will inconsistencies among them be resolved? China’s regulations governing contracts for the importation of technology specifically provide that the term of technology import contracts may not exceed ten years. The Contractual Joint Venture Law contains no comparable provision. The technology import regulations as currently implemented also contain standards and time frames for the approval of contracts that differ from those in the Contractual Joint Venture Law and could conceivably result in the involvement of more than one approval authority.

Other issues raised by the Contractual Joint Venture Law have been noted by commentators. These include the tax consequences for joint venturers of their choices with respect to structure, financial contributions and the rate at which the investments of the parties are recouped and the extent to which contractual joint ventures will be able to avail themselves of tax and other (such as customs and labor-related) preferences currently available to equity joint ventures.


81. See generally Cohen, supra note 74.

82. See Bates and Jianping, The New Cooperative Joint Venture Law, 10 East Asian Executive Reports No. 5 (May 15, 1988), at 7.
Each of these issues requires attention in the implementing regulations contemplated by the Contractual Joint Venture Law. Given their complexity, it is unlikely that the implementing regulations will deal satisfactorily with all of them. In the meantime, it is fair to conclude that the Contractual Joint Venture Law has provided neither the complete legal certainty denied by foreign investors nor the maximum incentive to invest intended by the Chinese.

C. Law of the People’s Republic of China on Wholly Foreign-Owned Enterprises

A third option for investors in selecting a medium for doing business in China is to form a wholly foreign-owned enterprise. The Law of the People’s Republic of China on Wholly Foreign-Owned Enterprises provides a general legal framework for the establishment and operation of wholly foreign-owned enterprises in China.

Foreign enterprise status offers a number of benefits for the foreign investor. First, foreign enterprises may qualify as Chinese legal persons under Chinese law, thus limiting their liability to the value of their assets. Second, foreign enterprise status clarifies the legal authority of the enterprise to repatriate all lawful profits (after payment of Chinese income taxes). Even the initial investment may be repatriated upon liquidation.

Third, foreign enterprise status offers nominal assurance against expropriation and reasonable assurances against undue interference by the Chinese Government. Finally, foreign enterprise status assures the availability of certain preferential tax treatment that is available to joint ventures.

84. Id. art. 8. See also supra note 52.
85. The limitation on liability flows from the status of the enterprise as a Chinese legal person under the Civil Code. See Civil Code, supra note 23, art. 48. See also supra note 52.
86. Foreign Enterprise Law, supra note 83, art. 19.
87. Id.
88. Id. art. 5. Expropriation or nationalization may be carried out if three criteria set forth in the Foreign Enterprise Law are met: the expropriation must be justified by social and public interest; it must be carried out in accordance with legal procedures; and (perhaps most important) “commensurate” compensation must be made. Id.
89. Id. art. 11.
90. For a detailed discussion of the tax treatment of wholly foreign-owned enterprises,
At this point, however, it is unclear whether wholly foreign-owned enterprises offer significant advantages to the investor in comparison to joint ventures. The establishment, operations and finances of foreign-owned enterprises promise to be as heavily regulated as those of joint ventures.\footnote{See Zheng II, supra note 44, at 290-291.} Also, restraints on the activities of wholly foreign-owned entities may not apply with equal vigor to entities with Chinese participation.

The Foreign Enterprise Law requires that foreign owned entities must use advanced technology or equipment or export all or most of their products.\footnote{See generally Zheng II, supra note 44, at 280-293.} This requirement may be more stringent than the comparable provision of the Joint Venture Law, which, in addition to permitting ventures that use advanced technology or are export-oriented, also expressly permits activities that help existing enterprises achieve technological reforms or provide training to technicians.\footnote{Foreign Enterprise Law, supra note 83, art. 3.}

In addition, to the extent a wholly foreign-owned enterprise is permitted to sell products in the Chinese market, it is conceivable that it may be at a competitive disadvantage relative to an entity formed with Chinese participation. Since the profits from such sales will be repatriated, the products of a wholly foreign-owned entity may experience discrimination in, for example, government procurement and may even be viewed as imports for purposes of Chinese regulatory requirements with respect to import substitution.

Finally, although the Foreign Enterprise Law defines a wholly foreign-owned enterprise as one whose entire capital contribution is of foreign origin,\footnote{See Zheng II, supra note 44, at 282.} the law does not define the term "capital" and is unclear regarding the implications of subsequent Chinese equity participation for the entity's legal status.

**D. Historical Profile of U.S. Investment Forms**

From the standpoint of the investment form selected, U.S. investment patterns in China have been atypical. While the contractual joint venture has established itself as the preferred form of investment in China overall, U.S. investors have chosen the equity joint venture by a large margin over contractual joint ventures.\footnote{Contractual joint ventures formed in China outnumbered total equity joint ventures.}
U.S. departure from the norm is largely a function of the types of investments that have been made by U.S. investors and reflects significant differences in investment priorities between U.S. investors, and, for example, investors located in Hong Kong and Macao, the largest statistical group of investors in China. The latter group, in part because of its geographical proximity to and cultural affinity with China, is better-situated to exploit opportunities for the manufacture and export of a product in the short term. For this group, the flexibility of the contractual joint venture offers clear advantages over the relatively more rigid and formal structure of the equity joint venture.

The typical U.S. investor, however, may have more long-term interests. With no current position in the market and no significant commercial ties, this investor may simply wish to establish a foothold, hoping to increase access to Chinese markets over the long term. The relatively proven, if somewhat more rigid, equity joint venture may be preferable for this purpose, since it has historically offered a greater degree of certainty and the prospect of long term market access.

Little information is available regarding the role of wholly foreign-owned enterprises in the mix of U.S. investment in China. According to Chinese data, only seven such entities had been formed as of December 31, 1986, representing only 0.2 percent of total U.S. investment. It is likely that at least some of these were formed prior to promulgation of the Foreign Enterprise Law in that year. Therefore, experience with this form of investment is quite limited. However, if the Chinese economy continues to become more open to and tolerant of Western financial institutions, it is entirely likely that wholly foreign-owned enterprises will play a larger role.

IV. THE STATUTORY FRAMEWORK FOR TECHNOLOGY TRANSFER

While the Joint Venture Law, the Contractual Joint Venture Law and the Foreign Enterprise Law form the statutory framework for the establishment of entities within China for activities involving technology transfer, other statutes, virtually all enacted after 1978, are also directly relevant to the creation of such entities


96. See id. at 101.
97. See id. at 109.
98. Id. at 98.
and to the transfer of technology.

A. The Economic Contract Law

The Economic Contract Law of the People's Republic of China provides a comprehensive legal framework for contractual relations among Chinese parties. The Economic Contract Law governs contractual relations among Chinese legal persons and between Chinese legal persons and Chinese individuals. The Economic Contract Law is of direct relevance to foreign investors because it affects domestic contractual relations between Chinese entities in which they have an interest as well as interpretations of later enacted statutes.

Such effects can be significant. The Economic Contract Law establishes a wide range of contract rules, many of which reflect the interest of the government in drafting a law that effectively implements the State Plan. For example, under the Economic Contract Law, a contract that violates the State Plan is void. The principal remedy for breach under the Economic Contract Law is specific performance, reflecting the value placed by the law on agreed upon activities taking place in furtherance of the State Plan. Under the Economic Contract Law, if the non-breaching party insists on specific performance, the breaching party may not discharge its obligation by the payment of damages.

B. The Foreign Related Economic Contracts Law

China promulgated the Foreign Related Economic Contracts Law in 1985. The FECL applies to non-transport contracts between Chinese organizations or enterprises and organizations or individuals whose principal place of business is outside the PRC.

The FECL, however, does not apply to contractual relationships between Chinese entities and entities formed in China pursu-
The latter are considered domestic entities under Chinese law to be domestic entities and relationships between Chinese legal persons are governed by the Economic Contract Law. Derived from statutes developed earlier at the regional level, particularly the contract regulations developed by the Shenzhen Special Economic Zone and the Dalian Economic and Technological Development Zone, the FECL does not supersede its predecessors, which continue to apply to contractual relations between domestic entities in these zones. The contract law governing an operation thus may differ, depending not only on whether a domestic entity is established, but also on whether the entity is located in either of these zones.

Unlike the Economic Contract Law, the FECL was adopted expressly with foreign interests in mind and conforms generally to internationally accepted commercial practices to accommodate foreign interests. For example, while the Shenzhen Contract Regulations require that foreign investors agree to performance guarantees with respect to imported technology, such a requirement is absent from the FECL.

The Shenzhen Contract Regulations contain no express authority to select a governing law. As a practical matter this means that contracts negotiated under these regulations have often been silent on this critical issue. The FECL, in contrast provides that the parties may select any law, or specified provisions thereof, to govern contractual disputes and only in the absence of such a choice shall Chinese law apply.


106. One observer has indicated that, while the laws may differ on particulars, the comparative liberality of the FECL and its national standing may encourage resolution of disputes in favor of more liberal treatment. See Zheng, supra note 10, at 54.

107. FECL, supra note 102, art 1. states: "This Law is formulated with a view to protecting the lawful rights and interests of the parties to Chinese-foreign economic contracts and promoting the development of China's foreign economic relations." (emphasis added)

108. Id. art. 5. Article 5 also provides, however, that "[t]he law of the People's Republic of China shall apply to contracts that are to be performed within the territory of the People's Republic of China, namely contracts for Chinese-foreign equity joint ventures, Chinese-foreign contractual joint ventures and Chinese-foreign cooperative exploration and development of natural resources."

The above provision appears to limit sharply the ability of foreign investors to apply non-Chinese law to contracts for the establishment of joint ventures whose activities will be carried out in China. While the FECL governs the formation of such contracts and pro-
Other provisions of the FECL require that contracts must be in writing and provide that such contracts are not binding until approved by the appropriate authority. The latter provision reflects a fact of economic life in the PRC, particularly with respect to joint ventures involving substantial investment by the domestic party to the contract. As a practical matter, conclusion of a negotiation with a joint venture partner evidenced by a written agreement does not constitute a binding contract under the FECL until the venture has received governmental approval. Investors, therefore, must be extremely wary of all representations regarding authority to approve any joint venture.

Damages allowable under the FECL are limited to consequential damages, which may not exceed the loss that the breaching party "ought to have foreseen at the time of the conclusion of the contract as a possible consequence of a breach of contract." Punitive damages are not permitted under the FECL. Liquidated damages, however, are recoverable unless they are substantially disproportionate to the loss. In such circumstances a party may seek to have the amount of liquidated damages adjusted through arbitration or by a court.

Unlike the Economic Contract Law, the FECL specifically provides that contracts shall be performed and interpreted in a manner consistent with the law applicable at the time of execution. Prior to the promulgation of the FECL, Chinese negotiators frequently had been unable to offer this assurance. Inclusion of this provision marked an important concession to the need of foreign investors for certainty and predictability.

The absence of a specific contract sanctity provision remains a concern in the context of the Economic Contract Law because of its stated purposes, which include "ensuring fulfillment of state plans and promoting the development of socialist modernization." Economic Contract Law, supra note 99, art. 1.

Deference to the State Plan permeates the Economic Contract Law. For example, "contracts that concern economic dealings in products or projects under an indicative state plan shall be concluded after taking account of state-issued targets . . ." Id. art. 11. "If state-fixed prices for a commodity have dropped, the contract price of the commodity shall be adjusted
The FECL provides that the parties shall, as far as possible, settle contract disputes through consultation or through mediation by a third party.\textsuperscript{116} This provision reflects a general Chinese preference for working out disagreements without resort to litigation and is similar to the provision of the Economic Contract Law.\textsuperscript{116}

Like the Economic Contract Law, the FECL provides for arbitration and judicial proceedings as possible dispute-settlement alternatives.\textsuperscript{117} Unlike the Economic Contract Law, however, the FECL provides that the parties may specify the country in which arbitration is to take place. In practice, this has often meant that an arbitration body of a neutral country, such as the Stockholm Institute, is selected.\textsuperscript{118}

The FECL permits recourse to a “people's court” under certain circumstances.\textsuperscript{119} The precise circumstances under which such recourse is available are not clear. First, FECL Article 38, which contains the relevant provision, appears on its face to apply only if no arbitration clause is provided in the contract.\textsuperscript{120} Therefore, by including an arbitration clause in their contract, the parties may have waived any contractual right to judicial consideration of their differences.

Second, even if the contract does not contain an arbitration clause, Article 38 appears to grant authority to sue only if a written arbitration agreement is not reached “afterwards.”\textsuperscript{121} This provision appears to relate back to FECL Article 37, which provides for arbitration of disputes pursuant to either an arbitration clause in the contract or “a written agreement reached by the parties afterward.”\textsuperscript{122} This may require at least a good faith effort by the parties to agree to arbitration - and a failure to agree - before litigation may be commenced.

For example, neutral arbitration bodies, such as Sweden's Stockholm Institute are often specified in arbitration clauses. If a Chinese party to a contract refuses to agree to arbitration outside accordingly.” Id. art. 17.
115. Id. art. 37.
116. See id. art. 48.
117. Cf. id. art. 48 and FECL, supra note 102, art. 37.
118. See Zheng, supra note 10, at 67 n.139.
119. FECL, supra note 102, art. 38
120. Id. art. 38. Article 38 provides: “In case neither arbitration clause provided [sic] in the contract nor written arbitration agreement reached afterwards, parties may bring suit in the People's Court.”
121. Id.
122. Id. art. 37.
China and a foreign investor wishes to avoid recourse to litigation in a Chinese court, he may take the position that the conditions of Article 38 providing for court review have not been met because the other side has unreasonably failed to agree to arbitration.

Although the FECL appears to require that suits arising under Article 38 be heard in Chinese courts, apparently this is not always the case. One writer has referred to a limited number of cases in which courts outside China have been specified in the contract as the court of jurisdiction.123


The United Nations Convention on Contracts for the International Sale of Goods came into force January 1, 1988.124 The United States and China are signatories to the Convention, which is self-executing and, therefore, effective without implementing legislation.125 The Convention applies to contracts for the sale of goods between parties whose places of business are in different contracting States.126 Where a party has more than one place of business, the place of business most closely related to the contract and its performance will be used to determine the applicability of the convention.127

The purpose of the Convention is to supply rules by which contractual disputes may be resolved when the contract itself provides no guidance. Thus, while the parties to a contract are free to specify the law that shall apply to disputes, the Convention supplies a set of commercially reasonable rules of decision in the event that they do not. The Convention parallels the United States’ Uni-

123. ZHENG, supra note 10, at 67 n.137.
125. The United States Senate gave its advice and consent to the Convention on October 9, 1986, subject to the reservation noted infra, note 126. President Reagan ratified the Convention by Proclamation on November 10, 1986.
126. The Convention also applies to contracts between parties of different states when the rules of “private international law” lead to the application of the law of a contracting state, even if the other state has not acceded to the Convention. Convention, supra note 124, Art. 1(1)(b). However, the United States made a reservation to this provision and is not bound by it.
127. “Place of business” is not defined in the Convention. Article 10 of the Convention provides that, if a party has no place of business, reference will be made to his habitual residence.
form Commercial Code in many respects.

The Convention will affect the implementation of the FECL with respect to matters that the Convention addresses and will provide additional certainty for U.S. investors in the PRC in a number of areas. For example, as previously noted, many contracts between U.S. and Chinese parties are silent on the question of what law governs the contract because of the inability of the parties to agree on this important issue. The absence of a contractual provision on this issue can be a major problem when disputes arise. If the contract is subject to the Convention, however, the parties can agree not to agree on the issue, taking comfort in the knowledge that the Convention itself provides both commercially reasonable rules of interpretation and commercially reasonable remedies in the event disputes arise.

The Convention will not solve every problem, of course. First, it may not apply to technology licensing agreements at all, because, by its terms, it applies only to contracts for the sale of goods. In addition, in some cases, there may be substantial question as to whether a "sale" is involved. For example, the Convention applies to contracts for the sale of goods "to be manufactured or produced... unless the party who orders the goods undertakes to supply a substantial part of the materials necessary for such manufacture or production."129

Consider the case of a contractual joint venture for the production of products intended for export in which the foreign investor supplies technology or know-how and the Chinese party provides raw materials, skilled labor and a production facility. The parties agree that the foreign party will recoup its investment in kind out of the production of the venture. In such a case, it may be argued that the joint venture is in reality a contract for the sale of the product to the foreign participant.

Even were such an arrangement properly characterized as a sale, however, the applicability of the Convention may still depend on whether the foreign party had supplied "a substantial part of the materials necessary for... manufacture or production" of the

128. Civil Code, supra note 23, art. 142, provides:
Where an international treaty that the People's Republic of China has concluded or participates in contains a provision different from the civil law of the People's Republic of China, the provisions of the international treaty apply except for an article to which the People's Republic of China has declared a reservation.

Civil Code, supra note 23, art. 142.

129. Convention, supra note 124, art. 3(1).
product by contributing technology or know-how. If it has, the Convention would appear not to apply.

Similarly, there may be a question as to whether a sale is sufficiently related to goods to trigger application of the Convention. For example, the Convention does not apply to contracts in which a "... preponderant part of the obligations of the party who furnishes the goods consists in the supply of labour or other services."\(^{130}\) Under circumstances where the Chinese party supplies a physical plant and skilled labor to operate the machinery, the Convention may thus not apply.

Second, the Convention may not apply if the U.S. party has opened an office in China. If that office constitutes a "place of business" and is determined to be the place of business most closely related to the performance of the contract, there may not be a contract between parties whose places of business are in two different contracting states,\(^{131}\) as required by the Convention.

Third, the Convention, even if applicable, does not necessarily offer the assurance of predictability that may first be supposed. Although it provides rules of decision that may be applied to a variety of typical contractual problems, it does not specify what body should apply those rules. Should recourse be made to judicial remedies, the parties may find themselves in a Chinese court, where language barriers, Chinese counsel and unfamiliar procedures may present a host of problems. In addition, the availability of traditional contract remedies, such as specific performance and punitive damages, may depend on the application of Chinese law by a Chinese court.

D. Regulations of the People's Republic of China on the Administration of Contracts for the Import of Technology

In the early 1980's, following several years of centralized government control over imports of technology that resulted in a number of failures,\(^{132}\) the Chinese government substantially altered its technology-import policies and permitted technology import decisions to be "decentralized" to the provincial and municipal level. The new policy permitted more localized decisions and was in-
tended to encourage imports of machinery, know-how and other intellectual property that could more easily be assimilated into local economies.

Decentralization, however, brought a proliferation of technology transfer arrangements that did not necessarily reflect larger national needs. Regional authorities did not engage in careful economic planning and tended to purchase technology that was not easily assimilated, that duplicated previously planned or executed purchases, or whose importation was inconsistent with the State Plan. Regional officials were ill-equipped to deal with sophisticated foreign investors and often had unrealistic business expectations. Consequently, many of the mistakes previously made at the national level were repeated at the regional level. The national government responded by instituting a process of “recentralization” that brought many decisions back to the national level where they could be evaluated for consistency with national needs in light of available financial resources.

1. The Technology Transfer Regulations and Implementing Measures

To further the recentralization process, on May 24, 1985, the State Council issued Regulations of the People’s Republic of China on the Administration of Technology Import Contracts of the People’s Republic of China, followed on October 1, 1985, by the Measures for Examination and Approval of Technology Import Contracts (the “Implementing Measures”), providing for review and approval of all contracts for the import of technology into China.

The Technology Transfer Regulations permit Chinese authorities to examine closely and approve contracts involving the importation of technology. The Regulations define “technology imports” as “technological items obtained, through trade or economic and technical cooperation, by companies, enterprises, organizations or individuals ... within the People’s Republic of China from companies, enterprises, organizations or individuals outside the People’s Republic of China.” Items that qualify as technology imports in-

133. Regulations of the People’s Republic of China on the Administration of Technology Import Contracts of the People’s Republic of China, promulgated on May 24, 1985, by the State Council, transl. in China Economic News Supplement No. 1, February 8, 1988 [hereinafter the Technology Transfer Regulations].
134. Id. art. 2.
include patents, technological processes, product designs and technical and quality control services, as well as licensing arrangements for patents or other industrial property rights, the transfer of other proprietary technology and the rendering of technical services.135

The Technology Transfer Regulations govern technology import contracts between Chinese entities (defined for this purpose to include equity and contractual joint ventures and wholly foreign-owned enterprises) and foreign entities.136 The Regulations do not, however, govern contracts for technology transfers that constitute the equity contribution of a foreign participant to one of these entities. Contracts for these transfers are governed instead by "the related laws and regulations of the State on foreign investment enterprises;" such laws presumably include the Joint Venture Law, the Contractual Joint Venture Law and the Foreign Enterprise Law.137

The Technology Transfer Regulations require that imported technology be "advanced" and "appropriate" (neither term is defined)138 and that it meet at least one of eight criteria specified in Article 3 of the Regulations. These criteria include the contribution of the imported technology to the development and production of new products, its ability to raise scientific and technical

135. The full list of technology import contracts expressly covered by the Regulations is as follows:
1. Contracts for transferring or the licensing of industrial property rights;
2. Contracts for licensing of technical know-how;
3. Contracts for technical services;
4. Co-production or co-design contracts that provide for any of items 1-3, above;
5. Contracts for "end-units" that provide for any of times 1-3, above; and
6. Any other contracts which, "in the view of the competent authority," require review and approval under the Regulations.
Id. art. 2.

136. The application of the Technology Transfer Regulations is not so limited in the Regulations themselves. The limitation is found in Article 4 of the current rules implementing the Regulations. See infra, note 146.

The Technology Transfer Regulations may also apply to contracts between foreign entities registered in the PRC and joint ventures with Chinese legal person status, although they do not specifically so state. See Horsley, National Technology Transfer Regs Codify General Policies on the Import of Technology, East Asian Executive Reports, July, 1985, at 9-10.

137. The Technology Transfer Regulations do not contain this specific exclusion. It is found at Article 4 of the current rules implementing the Regulations. See infra note 146.

standards, its ability to increase exports and foreign exchange earnings and its contribution to environmental protection.\textsuperscript{139}

The technology must be imported pursuant to a written contract,\textsuperscript{140} the term of which may generally not exceed ten years.\textsuperscript{141} The contract must provide a guarantee on the part of the transferor that the transferred technology is capable of achieving the technological objectives specified in the contract and that the technology transferred is "complete, correct, effective and capable of accomplishing the technical targets specified in the contract."\textsuperscript{142}

The Technology Transfer Regulations impose a number of restraints on the ability of the transferor to specify advantageous contractual terms. For example, special approval is required for any "tie-in" arrangements under which the transferor may require the transferee to purchase other items not necessarily related to the technology;\textsuperscript{143} for any restraints on the ability of the transferee to obtain the same or similar technology from other sources; or to improve the technology once it has been transferred.\textsuperscript{144}

Finally, consistent with the Joint Venture Regulations, the Technology Transfer Regulations provide that, upon the expiration of the contract, the transferee may continue to use the technology indefinitely. Thus, for all practical purposes, the transferee owns the technology upon expiration.\textsuperscript{145}

2. The Detailed Rules

On January 20, 1988, MOFERT issued a new set of detailed

\textsuperscript{139} Article 3 of the Technology Transfer Regulations provides in full as follows: The technology to be imported must be advanced and appropriate and shall at least conform to one of the following requirements:
1. Capable of developing and producing new products;
2. Capable of improving quality and performance of products, reducing production cost and lowering consumption of energy or raw materials;
3. Favorable to maximum utilization of local resources;
4. Capable of expanding product export and increasing earnings of foreign currencies;
5. Favorable to environmental protection;
6. Favorable to production safety;
7. Favorable to improvement of management; and
8. Contributing to advancement of scientific and technological level [sic].

\textit{Technology Transfer Regulations, supra} note 133, art. 3.

\textsuperscript{140} Id. art. 4.
\textsuperscript{141} Id. art. 15.
\textsuperscript{142} Id. art. 6.
\textsuperscript{143} Id. art. 9.
\textsuperscript{144} Id.
\textsuperscript{145} Id. \textit{See supra} notes 31-38 and accompanying text.
rules implementing the Technology Transfer Regulations. The Detailed Rules supersede the 1985 Implementing Measures and depart from them in significant ways.

First, the Detailed Rules appear to expand the purview of the Technology Transfer Regulations by permitting the examination and approval by MOFERT (or its delegate) of any "technology import contracts which need to go through the procedure of examination and approval in the view of the competent authority" (emphasis added). Although this provision does not appear to permit review of contracts that constitute equity contributions to joint ventures, the competent reviewing authority nevertheless has broad discretion as to whether to demand examination and approval of a contract not encompassed by one of the specified categories of reviewable contracts.

It may be impossible to know in advance whether compliance with the Detailed Rules is necessary, and suppliers of technology should anticipate their contracts being subjected to government approval procedures even though this is not specifically required by the Technology Transfer Regulations. Whenever possible, suppliers should comply with the Detailed Rules in order to ensure approval of the contract.

Second, in an effort to guard against vague and incomplete contracts intended to evade the requirements of the Technology Transfer Regulations, the Detailed Rules specify in great detail the terms that must be included in a technology import contract. Among other things, the contract must specify the type of technology to be imported, set forth any confidentiality obligations, contain a breakdown of the price and provide methods for dispute resolution.

The price, especially, is a factor to which the Chinese have devoted considerable attention. Stating the price of the contract as


147. Id. art. 2(6).

148. The Detailed Rules do provide for issuance of an "advance opinion" by MOFERT at the request of the licensee. The licensor, however, is not permitted to request such an opinion and so must first convince the licensee that it is desirable to do so. The request then becomes simply another item to be negotiated. The limited availability of this feature may actually place the foreign licensor at a disadvantage.

149. Id. art. 7.
one consolidated figure is not sufficient under the Detailed Rules. The contract price must be broken down and itemized so that the various costs can be separately evaluated.\footnote{150}{Id.}

Third, the Detailed Rules address the issue of contractual tie-in provisions in a different fashion than the Technology Transfer Regulations. The Regulations require that tie-in provisions for raw materials, spare parts, or related equipment be specifically approved by the reviewing authority.\footnote{151}{Technology Transfer Regulations, supra note 133, art. 9.} Article 10 of the Detailed Rules appears to permit tie-in provisions for raw materials, spare parts, or related equipment without specific approval, but limits the price a supplier can charge for these items to the price a similar product would command on the international market.\footnote{152}{Detailed Rules, supra note 146, art. 10.} Presumably, this latter change was made in an effort to permit increased flexibility in contractual arrangements).

Fourth, the Detailed Rules circumscribe the terms of confidentiality agreements contained in technology import contracts. Under the Technology Transfer Regulations, the parties are expressly permitted to negotiate confidentiality agreements regarding transferred technology that survive the expiration of the contract.\footnote{153}{Technology Transfer Regulations, supra note 133, art. 7.} The Detailed Rules, however, limit confidentiality agreements regarding proprietary technology and know-how to the term of the contract.\footnote{154}{Detailed Rules, supra note 146, art. 13.} Since a contract is itself generally limited to a ten-year period by the Technology Transfer Regulations,\footnote{155}{Id.} confidentiality agreements are also limited generally to ten years. If extraordinary circumstances require a longer period of confidentiality, provisions to this effect must be included in the contract and an explanation made to the reviewing authority when applying for examination and approval.\footnote{156}{Id. arts. 5 and 6.}

The Detailed Rules require (as did the Implementing Measures) that contracts signed by Chinese foreign equity joint ventures, co-operative ventures, and wholly foreign-owned enterprises be submitted to a competent national, regional, or local entity for approval.\footnote{157}{Id. art. 13.} The Detailed Rules clarify the operation of this requirement by establishing a hierarchical system that is based upon
the approval level of the feasibility study associated with the contract.

If the feasibility study was approved by any of the ministries or departments directly under the State Council, the contract must be examined and approved by MOFERT. If the feasibility study was approved by a local or regional government, that authority would be responsible for approving the contract. This system ensures that the entity most familiar with the proposed project and its feasibility study has an opportunity to review the completed contract.

There are exceptions, however. For example, certain contracts signed by entities in Beijing — such as a government agency or foreign trade corporation — on behalf of end-users located elsewhere in China must be examined and approved by MOFERT regardless of the level at which the feasibility study was approved.158

Under the Detailed Rules, a reviewing authority may reject a contract for any of the following reasons:

1. it violates the laws of the state and hurts the public interest;
2. it infringes on national sovereignty;
3. its terms are not consistent with the feasibility study;
4. the basic clauses and content are imperfect;
5. no provisions are made for dispute resolution;
6. no stipulation is made as to the efficiency of the technology or the quality warranty on the resulting manufactured products;
7. the price or method of payment is questionable;
8. the rights, responsibilities and obligations of the contracting parties are unclear or unfair; or
9. it contains preferential tax commitments that do not have the approval of the relevant tax authority.159

Once a contract has been rejected, however, it is not beyond redemption. The parties may amend it within a certain period specified by the approval authority. Only if the parties take no corrective measures will the contract be completely rejected.160

As an extra measure of protection for the recipient, the Detailed Rules require the supplier to guarantee that it is the rightful owner of the technology in question or that it has the right to dispose of such property.161 If a third party subsequently brings a

158. Id. art. 6.
159. Id. art. 18.
160. Id.
161. Id. art. 11.
lawsuit for infringement against the recipient, the supplier will be
obligated to defend the suit and indemnify the recipient for any
losses sustained.\textsuperscript{162}

The Detailed Rules also provide that improvements to the
transferred technology made by the recipient, as well as any patent
claims thereto, belong to the recipient.\textsuperscript{163} This provision operates
as a restriction on the ability of the transferor of the technology to
negotiate "grantback" clauses under which rights to improvements
in the technology effected by the recipient are contractually
granted to the transferor. Under the detailed rules such improve­
ments belong to the transferee. If the transferee wishes to grant
rights to them, it may demand compensation on terms provided
for by the contract.

While this provision may be of limited concern to firms deal­
ing in rapidly evolving technologies, it reflects the Chinese view
that, once a technology import contract is executed, the imported
technology effectively belongs to the recipient. As is the case under
the Joint Venture Law, the Detailed Rules permit a recipient to
continue using imported technology following the expiration of the
contract unless the approval authority has approved a contract
clause that prohibits its use after that time.\textsuperscript{164} Licensors of tech­
nology to the Chinese should bear in mind, therefore, that they are
in effect selling their technology to the recipient, not simply per­
mitting the use of it.

Although the Technology Transfer Regulations provide a uni­
form, national set of requirements and procedures for the content
and approval of technology transfer contracts, they have not, as
implemented, offered significant improvements in the regulatory
climate for the foreign investor, for the following reasons.

First, the Regulations differ in several respects from the pred­
ecessor Shenzhen and Xiamen Regulations but fail to clarify their
relationship to those regulations (which remain in effect).

Second, the Regulations do not form the sole regulatory
framework for technology transfer contracts. As noted previously,
the Regulations as implemented do not apply to imports of tech­
nology that constitute a foreign investor's equity contribution to
the venture. However, any other contracts for the transfer of tech­
nology to these entities are governed by the Regulations. Thus, for­

\textsuperscript{162. Id.}
\textsuperscript{163. Id. art. 12.}
\textsuperscript{164. Id. art. 15.}
eign investors who enter into joint ventures in anticipation of licensing technology or providing services to these joint ventures other than as part of the formation of the venture must proceed along two different approval tracks.

As has been pointed out by one commentator, licensing arrangements are frequently negotiated at the same time as the terms of the joint venture itself, yet the licensing side of the transaction cannot be approved until the joint venture itself comes into existence. This exposes the foreign investor to the risk that, once it has committed equity to the project, the licensing agreement may not be approved. 161

In addition, while MOFERT has indicated that it will not disturb contracts associated with previously approved joint ventures, 166 there is no specific provision for this in either the Technology Transfer Regulations or the Detailed Rules, leaving yet another issue to be carefully dealt with by contract.

Thus, while the Detailed Rules codify recent Chinese practice with respect to the approval and implementation of technology import contracts, they leave, as does the new Contractual Joint Venture Law, some questions unanswered. If history is any guide, these questions will, in time, be addressed by new implementing regulations that clarify certain issues while raising still others.

V. The Chinese Patent Law and Provisions Relevant to the Protection of Trade Secrets

A. Patent Law

The scope and quality of patent protection is a major consideration to any investor considering doing business in any country. In 1978, the Chinese government, recognizing that, consistent with socialist principles, some accommodation had to be made to the need to encourage individual initiative and inventiveness, and that China’s failure to accord adequate protection to foreign technology was resulting in far higher acquisition costs for that technology, 167 made a commitment to the establishment of acceptable standards of protection for intellectual property. The Patent Law of the People’s Republic of China was promulgated six years later, on March

166. See id.
167. For an illustrative discussion of problems experienced as a result of the lack of adequate patent protection in particular, see ZHENG, supra note 10, at 410, 411.

The Patent Law is generally consistent with the minimal requirements of the Paris Convention. However, its coverage is generally less liberal than that accorded by most Paris Convention signatories (on the other hand, its coverage is more liberal than many developing countries, which often limit the scope and quality of patent protection in order more easily to develop home industries using technology patented elsewhere).

The Patent Law excludes from patentability inventions that violate the law, social morality or the public interest. While these are potentially broad and subjective exclusions, they are typical of many patent regimes. Also excluded are rules and methods for mental activities (a term generally including computer programs and software), methods for the diagnosis and treatment of disease, animal and plant varieties, pharmaceutical products and substances derived from a chemical process and food, beverages and flavorings.

Three features of the Patent Law are especially worthy of note. First, China has chosen to adopt the "first-to-file" approach for its patent system, under which "novelty" (a fundamental element of patentability) exists only if, among other things, no prior application has been filed for the identical invention. Under this approach, the first application for a patentable invention will be approved even though a subsequent applicant (or a person who objects to the first application) may earlier have satisfied the requirements of patentability.


170. Patent Law, supra note 168, art. 5.

171. Id. art. 25.

172. Id.

173. Id.

174. Id.

175. Id.

176. Id. art. 22.

177. A significant exception to this requirement was created when China acceded to the
Second, China has adopted a "limited world novelty" approach to the patenting of inventions. This means that, an applicant must not have previously permitted the invention to enter the public domain in any form, including having received a patent elsewhere on the invention.

An exception to this general rule renders it largely irrelevant for U.S. investors. As previously described, China, pursuant to the Paris Convention, undertook to allow a "grace period" during which inventions for which patents are sought in China may be considered "novel" notwithstanding the filing of patent applications not more than one year earlier (six months for design patents) in other signatory nations.

Third, the Patent Law provides for "compulsory licensing." Under the Patent Law, if a patent holder fails to exploit the benefits permitted by the patent in China (i.e., manufacture the product or utilize a patented process) during the three-year period following granting of the patent, another person or entity may be licensed to do so. While compulsory licensing is a feature not uncommon among patent regimes of Western countries, it is altogether absent from U.S. patent law, which grants the holder virtually absolute authority to withhold the benefits of his invention from society.

In practice, the compulsory licensing provision of the Patent Law is not likely to be as burdensome as it sounds and the perception that the would-be licensee may be able to achieve through administrative fiat what he cannot get through negotiations is not justified.

First, in order for the provision to have any effect, the patent must go unexploited for three years after it has been granted.

Second, in order to petition successfully for a compulsory license, the would-be licensee must first establish that he is qualified to exploit the license. He must then demonstrate that the patent holder has unreasonably withheld a license, e.g., that he has demanded unreasonable terms or has acted unreasonably in some other way.

Paris Convention, signatories to which agree to grant a one-year priority right to inventions patented in other signatory countries. The grace period allows inventions for which patents are sought in China to be considered novel notwithstanding the filing of patent applications not more than one year earlier (six months for design patents) in other signatory nations.

179. Id. arts. 52-53.
180. Id.
Finally, a licensee under this provision must pay reasonable license fees and may not sub-license the patent to anyone else. This means that even if the government grants a compulsory license, the licensor remains entitled to fees that might at least be commercially reasonable even if not what he may have refused.

On balance, while the compulsory licensing feature of the Patent Law raises a number of potentially troublesome issues for the foreign patent holder, its most likely impact will be to add additional incentives for the successful negotiation of technology licensing arrangements in China.

Other aspects of the scope and quality of patent protection available in China have been the source of some discontent among investors - particularly U.S. investors - interested in doing business there. For example, as noted previously, the Patent Law does not afford protection to pharmaceutical products and products resulting from chemical processes. This exclusion creates difficulty for the U.S. pharmaceutical and fertilizer industries. Each has reported significant problems with piracy.

China justifies the exclusion of these classes of products on the basis of its status as a developing nation and its need to provide protection for its infant industries. China also points out that, under the Patent Law, process patent protection is available for these types of products. However, the affected industries complain that process patent protection is without significance since, once such a product has been reverse-engineered, it may often be reproduced by a variety of unpatented methods or processes.

Second, as previously noted, China does not offer patent protection for computer programs and software.

Third, there is concern that China's patent system as administered does not offer the full protection contemplated by the law. As yet, non-Chinese are not permitted to submit or prosecute patent applications before the Patent Office. Foreign applicants

181. Id.

182. Article 60 of the Patent Law suggests, however, that in process patent infringement cases, the burden may be on the alleged infringer to demonstrate that the process used was other than the patented process. This is a heavy burden, and, if it must be carried by the defendant, the level of patent protection for chemically derived substances in China would be substantially strengthened.

183. There are indications, however, that software that is "built-into" an otherwise patentable product may be patentable as part of the product. In this regard, see R. Conroy, Technology Transfer to China: Legal and Practical Considerations, 21 STANFORD J. INT'L. L. 549 [hereinafter Conroy], at 567 n.43.

184. Foreigners having a "habitual residence or business establishment" within China
perceive that they are placed at a disadvantage by the requirement that all applications be made and supported by Chinese before a Chinese governmental agency.

Fourth, the Patent Law contains no sanctions for contributory infringement - infringement by others involved in the chain of infringing steps such as contract manufacturers, shippers, wholesalers and retailers — and provides no clear access to the courts if infringement problems are not resolved.

Finally, some observers have noted that, while it does not distinguish in most material respects between foreign and domestic patent applicants, and thus may be said to provide national treatment to all patent holders and applicants, the Patent Law may violate at least the spirit of the U.S.-China Trade Agreement,\textsuperscript{185} in which the United States and China agreed to provide reciprocal treatment in the areas covered by the Agreement, which applies to patents, trademarks, copyrights and other intellectual property.

Article VI of the U.S.-China Trade Agreement appears to provide for reciprocal undertakings by the parties with respect to the degree of protection afforded intellectual property. Subparagraph (3) of Article VI provides that “[b]oth Contracting Parties agree that each Party shall seek, under its laws and with due regard to international practice, to ensure to legal or natural persons of the other Party protection of patents and trademarks equivalent to the patent and trademark protection correspondingly accorded by the other Party.”\textsuperscript{186}

Under generally accepted practice, reciprocal treatment requires each party to afford treatment to the other that is equivalent to that which it receives from the other. Reciprocal treatment differs from national treatment — the approach adopted by the Paris Convention\textsuperscript{187} — in that national treatment requires a party only to accord the same level of treatment to the other party as is accorded to its own nationals.

While Article VI may be subject to varying interpretations, and while there appears to be some question as to what was actu-
ally intended by the signatories, its wording suggests that each party undertook to provide the same benefits to the other as were available to it (i.e., reciprocal treatment). Since the intellectual property protection available to the Chinese in the United States is, for the most part, broader than that available in China, the argument has been made that the Chinese may be in violation of their undertakings under the Agreement.188

B. Treatment of Trade Secrets in Chinese Law

China has not adopted a trade secrets law. As a consequence, industrial property189 that is not patentable enjoys no statutory protection in China. This poses difficulties for U.S. investors. Because trade secrets are not statutorily defined and there is no statutory prohibition of, or penalty for, the wrongful conversion of trade secrets, an investor's sole protection against, and remedy for, the wrongful conversion of trade secrets is by contract. In negotiating contracts involving the transfer of unpatented technology or know-how, the U.S. investor must, therefore, take every possible step to ensure that his concerns regarding confidentiality are fully addressed.

For example, the contract should identify and bind the end-user of the technology. Typically, contracts involving technology transfer involve governmental agencies that are not actually responsible for performance. The actual user of the technology — the entity and its principal employees — should be explicitly identified in the contract as persons to whom the contractual duty of maintaining confidentiality applies. In some cases, it may be possible to bring these persons into the contract as parties. The end-user should be made specifically responsible, of course, for the conduct of any third parties that will have access to the technology. To the extent possible, these entities should also be bound contractually.

The contract should identify with precision the data, information and trade secrets to be protected. These may exist in more than one form and almost certainly will not all be in tangible form. Second-generation data or information gained from operational experience that is to be protected must also be described with care since it may have a direct bearing on the profitability of the venture.

188. In this regard, see Chwang & Thurston, supra note 19, at 153.
189. See supra note 6.
Finally, the contract must specifically identify the remedies for breaches of confidentiality agreements. Those remedies should be as explicit and as comprehensive as possible. A guarantee of payment from senior personnel of the end-user for wrongful disclosure, in addition to similar guarantees from the end-user itself, is desirable (but not always obtainable).\textsuperscript{190} Liquidated damages provisions may be essential.

Such support as there is elsewhere in Chinese law for the protection of trade secrets offers only mild comfort that the Chinese will afford greater protection of trade secrets in the future. As noted previously, the Technology Transfer Regulations, as implemented through the Detailed Rules, clearly contemplate the contractual transfer or licensing of unpatented industrial property,\textsuperscript{191} and the formation of agreements providing for maintaining its confidentiality.\textsuperscript{192} Yet, the Detailed Rules restrict the scope of such agreements by limiting their duration to that of the underlying contract except in the case of unspecified "special conditions."\textsuperscript{193}

Furthermore, the Detailed Rules actually release the Chinese party entirely from such agreements if, "not owing to the recipient", the industrial property is made public.\textsuperscript{194} As a practical matter, therefore, the recipient has little incentive to police the activities of its employees or subcontractors with respect to the protection of trade secrets, since, in many cases, the recipient may actually be better off if the trade secrets are released. The potential for connivance at, if not outright complicity in, the release of valuable industrial property is thus significant.

In these respects, the Detailed Rules are actually more restrictive than the Implementing Measures issued in 1985 that they replaced. It, therefore, remains essential that the transferor of trade secrets or proprietary data take every possible step to protect its interests at the contract negotiating stage.

\textsuperscript{190} In this regard, see Conroy, supra note 183, at 565.

\textsuperscript{191} The second of the six types of contracts to which the Technology Transfer Regulations, through the Detailed Rules, apply is "Contracts for licensing of technical know-how," described as:

\begin{quote}
[T]hose for provision or impartment of a certain technical knowledge which has not been made public and is used for manufacturing a certain product, or applying a certain technology, as well as a product design, a technical process, a formula, quality control and management skills and such technical knowledge has not yet obtained the legal protection of industrial property rights. (emphasis added)
\end{quote}

Detailed Rules, supra note 119, art. 2(2).

\textsuperscript{192} Technology Transfer Regulations, supra note 133, art. 7.

\textsuperscript{193} Detailed Rules, supra note 146, art. 13.

\textsuperscript{194} Id.
VI. CONCLUSION

While there remain gaps and gray areas that need to be filled and clarified, there is no doubt about China's commitment to becoming a full-fledged member of the world trading community and to providing a predictable and businesslike investment environment for foreign investors. China has a strong interest in the transfer of Western technology on terms consistent with its own national plan, and it is aware of the need to bend internal prerogatives to international commercial realities. China's awareness of the concerns of foreign investors for the protection of intellectual property has shown continuous growth, and this has engendered a major effort to conform China's contracting practices and its level of intellectual property protection to international norms.

The development of Chinese law regarding technology transfer has been rapid in the recent past. There is reason to expect further evolution as foreign investment increases and becomes a more integral part of the Chinese economy. Given the progress that has been made, there is reason to be optimistic that the environment for foreign investment will become ever more congenial.